

1046-Z1-1660

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([cvonrenesse@wsc.ma.edu](mailto:cvonrenesse@wsc.ma.edu)). *The Role of an Inquiry-Based Classroom in Undergraduate Mathematics*. Preliminary report.

We are currently designing a research program to investigate the way in which an inquiry-based classroom influences an undergraduate's attitude to and learning of any level of mathematics. We began by focusing on two aspects of this: how to define an inquiry-based classroom and how to measure student's attitude towards mathematics. To solve the first problem, we turned to the Reformed Teacher Observation Protocol (RTOP) developed at Arizona State University. To address the second problem, we are currently working to adapt the validated CLASS-Physics, a survey which measures students' attitudes to physics, for mathematics. We have begun working on this by creating our own survey based on the questions found in the CLASS-Physics. In the future, we would like to find an effective way to measure critical thinking ability and conceptual understanding in our undergraduates. We would then hope to put these pieces together to develop an assessment of the role of the inquiry-based classroom in undergraduate mathematics education. In our talk, we will present our work to date and discuss our future goals. We welcome all thoughts and suggestions! (Received September 16, 2008)